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ABSTRACT

The Minneapolis Experimental Schools Project (Southeast Alternatives)--a five-year program established in 1971 to test comprehensive change in education--enrolls 2,200 K-12 students, approximately 4% of the public school population. Southeast Alternatives (SEA) is dedicated to four major goals: (1) to provide a curriculum which helps children master basic skills, (2) to test four alternative elementary school styles, and selected options in secondary programs articulated upon the elementary alternatives, (3) to test decentralized governance with some transfer of decision making power from the Minneapolis Board of Education and the central administration of the Minneapolis Public Schools, and (4) to test comprehensive change over a five-year period, combining promising school practices in a mutually reinforcing design. According to the comprehensive change model which SEA is testing for the National Institute of Education, projects should be able to benefit from feedback about their own progress in order to modify their behaviors throughout the life of the project. Salient points concerning the successful formative evaluation model which has been developed to meet the diverse needs of the various SEA programs are discussed. (Author/MV)

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Evaluating Innovative Programs: The Minneapolis Perspective

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The opinions expressed in this paper do not necessarily represent the official position or policy of the Minneapolis Public Schools, the Southeast Alternatives Project nor the National Institute of Education and no official endorsement should be inferred.

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Evaluating Innovative Programs: The Minneapolis Perspective

Nationally, the Experimental Schools Program was initiated by the Office of Education in 1971 to test comprehensive change in education. One year later responsibility for the program was transferred to the newly created National Institute of Education.

Background on Southeast Alternatives

A part of the Minneapolis Public Schools, the Minneapolis Experimental Schools Project (Southeast Alternatives) was funded for a five year period beginning with the 1971-72 school year. With approximately 2200 K-12 students, Southeast Alternatives schools enroll about 4% of the Minneapolis Public Schools K-12 population. Roughly three-fourths of these 2200 students and their families reside in the geographic area which contains the project schools while the remainder reside elsewhere in Minneapolis.

As stated in the renewal proposal for the final 30 months of the project, Southeast Alternatives (SEA) is dedicated to the following four goals:

I. [The project will provide] a curriculum which helps children master basic skills . . .

II. The project will test four alternative school styles (K-6) and selected options in schooling programs for grades 7-12 articulated upon the elementary alternatives.

III. The project will test decentralized governance with some transfer of decision making power from both the Minneapolis Board of Education and the central administration of the Minneapolis Public Schools.

IV. The project will test comprehensive change over a five year period from 6/1/71-6/30/76 combining promising school practices in a mutually reinforcing design. Curriculum staff training, administration, teaching methods, internal research, and governance in SEA make up the main mutually reinforcing parts.

Families participating in the project may choose from among the following programs:

The Contemporary School (K-6) at Tuttle utilizes the graded, primarily self-contained classroom structure. The basic skills of mathematics and language are developed through an individualized multi-text, multi-media approach. Students move between their homerooms and a variety of centers to participate in learning activities throughout the entire school day.

The Continuous Progress School (K-6) in the Pratt building allows children to advance at their own speeds without regard to grade level. Children are placed in homeroom groupings according to their reading placement and spend 60% of their day in these homerooms. All subject areas are taught by the homeroom teacher. Mornings are structured with language arts, math, social studies, science, music and other curricular areas. About 40% of student time is spent in two-week interest groups which are selected by students, faculty, parents and volunteers.

The Open School (K-6) at Marcy offers its students an opportunity to influence their education. An integrated curriculum which emphasizes learning basic skills through experience and process approach, that of children learning how to learn, to make independent judgments and to discover and pursue their interests, is offered. Children are grouped in multi-aged "families" and a flexible daily schedule allows times for activities at various resource centers. Through the Other People Other Places Center students learn how to arrange for their own resources and extended trips into the city or wilderness to expand their educational experience.

The Free School (K-12) offers a flexible curriculum which allows students to pursue the areas they wish to develop and experience with emphasis on making the curriculum relevant to present day issues and enhancing students' skills, knowledge and inner autonomy for acting as free people in an environment of change. The Free School is particularly committed to recognize and oppose racism, sexism and class oppression in today's world. Stu-

dents are grouped into primary, middle and secondary categories with some cross-age teaching across groups. Although basic skills are stressed, and graduation requirements are set, a flexible approach is used in achieving goals.

The middle school program at Marshall-University High School has been designed to meet the needs of the diverse groups of students coming from the various SEA elementary programs. An Open and Continuous Progress program is available for students in 6th-9th grades. Students 11 and 12 years of age may choose to remain in their elementary school until grade 7 or enter either of the other two transitional programs. Graded classrooms are available to 7th and 8th graders. A.L.E., the adjusted learning environment for students with special needs, and a special reading center are also offered to Junior High students. Teachers work in teams to offer a coordinated program.

A flexible array of courses and activities are available at the 9-12 Senior High School level. Each Marshall-U student, with parental consent, designs his or her own educational program within a system of twelve week courses. In addition to single discipline courses there are interdisciplinary courses, independent study opportunities, and a variety of off-campus learning programs in the community. A 9-12 open classroom for 60 students now makes possible K-12 open education in SEA.

Advisory/governing councils consisting of parents, staff and sometimes students have been established at each of the schools. In addition, the Southeast Council composed of parents, staff and administrators serves as a strong advisory to the SEA Director.

Southeast Minneapolis, the geographic setting for the project, is a diverse area containing factories, flour mills, and shopping areas. The area also houses the main campus of the University of Minnesota. Stately

old homes, low income apartments and expensive condominiums are all located within the area. The mixture of ages, occupations, interests and life styles represented in the area supports a diversity of views about the nature of public education which are reflected in the five SEA alternative schools.

Building a Formative Evaluation System

Throughout the five year history of Southeast Alternatives two evaluation groups have been directly involved with the project. Level I (Internal) evaluators are supported by the federal funds received by Minneapolis for conduct of the project. They are administratively responsible to the SEA Director. Additional evaluation activities are conducted by the Level II (External) evaluators who are contracted separately by the National Institute of Education (NIE) and are directly responsible to them.

According to the comprehensive change model which Southeast Alternatives is testing for the NIE

> . . . projects should be able to benefit from feedback about their own progress in order to modify their behaviors throughout the life of the project--a sort of real time guidance feedback process which keeps the program moving with greater and greater precision toward its stated goals (or subsequent modifications thereof). (Memorandum from Robert Binswanger, Chief, NIE/ESP, to James Kent, Director, SEA, April 12, 1974.)

In order to carry out this charge, nearly all of the Level I efforts in Minneapolis are of a formative nature. These formative evaluation efforts may be characterized as follows:

- their purpose is to improve the program;
- their primary audience is always the program participants -- students, parents and school personnel;
- different evaluation situations dictate the conditions of reporting -- to whom, report medium, etc.; and
- the evaluation must be responsive to the needs of the program participants.

The diversity of the school programs offered in Southeast Alternatives has created a need for a variety of kinds of information. The type of information which is highly useful in one alternative may be of little or no value in another. Evaluators in the project have tried to develop a model/methodology that would allow them to maintain the flexibility and responsiveness necessary to assure that the information provided to each program is consistent with its goals and needs.

Informal as well as formal feedback (e.g., Giannotta, 1975; Rawitsch, 1974) indicates that decision makers in the Southeast Alternatives project have found the formative evaluation efforts of the SEA Internal Evaluation Team to be of value. The purpose of the present paper is to share what I feel are some of the most salient points which have contributed to achieving this success.

The SEA internal evaluation system is the product of the efforts of many people -- both members and non-members of the evaluation team. To them goes full credit for the development of the system described herein. However, the perceptions of the system contained in this paper are mine and I alone must accept responsibility for any errors of omission or commission.

Developing Credibility. Perhaps the major factor in the success of the SEA internal evaluation effort has been the credibility that the evaluation team has been able to develop. Indeed, a recent study elsewhere (Lange & Speiss, 1974) indicated that of four factors related to communication between evaluator and decision maker -- frequency of interaction, interpretability of reports, advocacy for his/her conclusions, and credibility of the evaluator -- credibility is the most important one in determining whether or not practitioners will utilize the results of an evaluation study.

Credibility is not something that is automatically granted by virtue of a particular way in which evaluation efforts are approached, nor is it immediately granted because of an evaluator's (or evaluators') skills.

Rather, it is something that is achieved through a combination of the two factors. While the present paper will contain some comments about my biases regarding the requisite skills evaluators should possess, the main emphasis will be on evaluation models and methodologies which can effectively contribute to the development of a credible evaluation effort.

Organizational Structure. The evaluation efforts conducted by the SEA team can be divided into two major categories, namely, project-wide and intra-school. Project-wide evaluation efforts are those which deal with information which pertains to more than one of the schools in the project or to one of the other SEA components which serve schools; e.g., Teacher Center, Community Education, Student Support Services. In contrast, efforts of an intra-school nature are those which deal only with the program in a particular SEA school or with some aspect of the program in that school.

Each school in the project has had a member or members of the evaluation staff assigned at least part-time to provide primary service to that school. As much as possible the evaluators assigned to schools try to function as "live-in" evaluators. They have some kind of office space in the building and try to spend as much time as possible in the building. This arrangement allows evaluators to get to know staff on a somewhat informal basis, to assist with school functions from time to time and to engage in other activities which foster a feeling among staff that this person is not some outsider there to spy on them but is, rather, someone there to help them with their problems.

The heavy evaluation commitment to this intra-school service is indicated by the fact that in the third year of the project approximately 55% of the total time devoted directly to evaluation activities was for service to individual schools. In the two succeeding years the corresponding percentages were even higher -- 70% and 60% respectively.

A further indication of SEA's commitment to this type of service is that in the second, third and fifth years of the project three of the five SEA schools were receiving evaluation service equivalent to at least one-half an evaluator's time. Such service was sometimes provided by more than one person in order to provide the types of expertise needed for the tasks being conducted. In Year 4, four of the five program were receiving this level of service.

In addition to enabling the evaluator to develop credibility in the eyes of staff, this type of service arrangement allows evaluators to become intimately familiar with the philosophy and operation of the program(s) to which they are assigned. This knowledge of program philosophy and operation enables evaluators to be much more conscious of the kinds of information the various decision makers in that program will find useful. It also puts them in a position to assess the realities of what information gathering techniques are feasible in that setting. For example, evaluators are pretty much aware of what information may be gleaned from existing records, and whether or not this information is likely to be accurate, whether interviews with students might require large amounts of time to first locate the student, etc.

The live-in evaluator arrangement has been a crucial factor in achieving the degree of success that we have in SEA evaluation. The good feelings that practitioners have about the evaluator(s) assigned to their program seem to extend to their project-wide evaluation colleagues and the work

they do, thus establishing a degree of credibility for the entire evaluation component. Project-wide evaluators establish credibility of their own hrough the material they produce and the interactions they have with staff, but the live-in evaluators have many more interactions with school staffs and they are in a sense the evaluation component's front line offense.

Evaluators' Backgrounds. Another factor which contributes to the development of credibility is the quality of personnel who serve on the evaluation team. As members of the team have been selected, emphasis has been placed upon securing people who can effectively interact with the clients they serve. Without these skills an evaluation effort such as SEA's, which stresses the involvement of decision makers in all phases of the evaluation process, would seem doomed to failure. Particularly in the case of "live-in" evaluators, we believe that she/he can best serve the program if he/she has had prior experience with the educational philosophy on which the program is based. Not only does such background help her/him better understand what's happening in the program but it also seems to ease her/his acceptance by the clientele.

Although we have stressed these factors, we have not dismissed all other criteria as evaluators have been selected. The diverse information needs of the SEA programs means that the technical criteria required differ depending upon what specific program(s) the person is to be serving. Some members' orientation is primarily qualitative while others' is primarily quantitative.

The information in Table 1 provides a more complete view of the kinds of backgrounds members of the team posses. For each person who was a member of the team in 1974-75 (Year 4), this table shows educational background, previous experience in education, the programs to which they were assigned and the approximate time at which they first joined the team.

TABLE 1. Background and assignment for 1974-75 evaluation team members.

Background	Assignment	Date Joined Team
Doctorate in Educational Research and Evaluation; former secondary mathematics teacher	Evaluation Manager Project-wide Contemporary School Continuous Progress School	Winter, 1973-74
Doctorate in Educational Administration; former secondary industrial arts teacher	Project-wide Contemporary School	Fall, 1971
ABD in Educational Psychology with specialization in Individual Differences and Developmental Psychology	Project-wide Jr/Sr High	Fall, 1974
Master's in Curriculum and Instruction; former secondary English teacher	Open School Jr. High Open	Spring, 1972
Master's in Curriculum and Instruction with specialization in open education; former elementary teacher	Open School Project-wide	Fall, 1974
Graduate work in Philosophy	Free School Continuous Progress	Fall, 1973
Bachelor's in Urban Studies/ Elementary Education	Team Maintenance Budget Editing Dissemination	Fall, 1974

When a SEA evaluator is faced with a task in which she/he needs assistance, the variety of backgrounds on the team usually makes it possible to obtain such help within the group. This is true both when an evaluator wants assistance in an area which is somewhat foreign to her/him and when she/he wants a second opinion in an area that is quite familiar. The ability to provide joint planning for many evaluation tasks has resulted in more clearly focused studies, for different team members have seen the study from different viewpoints.

Administrative Structure

The evaluation component's administrative reporting structure is another organizational factor which has contributed to the success of evaluation in Southeast Alternatives. Under this reporting structure, evaluation personnel, whether assigned to work within a particular SEA school or on efforts of a project-wide nature, are responsible to the SEA Evaluation Manager rather than to a school principal. This seems important in at least three respects.

First of all, whenever "live-in" evaluators are mentioned, the problem of objectivity seems to come to most people's minds. The administrative structure provides some safeguard, against bias, since it removes control of the evaluator's destiny from those s/he serves. It also provides someone who can monitor at least informally the evaluator's plans and actions to help her/him avoid, where possible, use of techniques/methods which might be prone to bias. As an aside it should not be overlooked that when the purpose of evaluation is centered on program improvement, those involved realize that nothing can be gained unless the evaluator "tells it like it is" -- this is, perhaps, the greatest safeguard against bias.

Later in this paper I discuss the role that decision makers play in developing evaluation plans. It must be remembered that principals are not the only decision makers in a school, nor are they necessarily the most important one in many cases. The kind of evaluation reporting structure utilized in SEA provides some degree of subtle safeguard to help assure that all decision makers have some access to the limited evaluation resources available to a program. That is, if any principal would think of capturing the use of all evaluation resources s/he knows that the ultimate decision is not hers/his. Along the same line, this reporting

structure also provides a subtle safeguard which can help "live-in" evaluators avoid heavy involvement in tasks that have more to do with implementation than evaluation.

An Evaluation/Decision Making Model

In order for evaluation information to have a maximum impact on the decision making process, evaluators must do more than simply communicate their results to decision makers. Evaluators must work closely with decision makers to continually discuss plans and actions and to solicit the decision makers' reactions.

The communication and cooperation necessary to accomplish this is greatly facilitated by the staffing/organizational patterns just described. To further facilitate decision makers' involvement in the evaluation process, the evaluation component of the Southeast Alternatives project has implemented a decision making/evaluation model very similar to that suggested by the Phi Delta Kappa National Study Committee on Evaluation (Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman & Provus, 1971). Decision making/evaluation in SEA follows a process similar to the following (Rawitsch, 1974):

> Given: We must make a decision. To make this decision, we need the answers to certain questions. To get the answers to these questions, we need certain information. To get this information, we need "data" gathering strategies (p. 4).

Thus, the identification of a specific decision to be made provides direction for the evaluation process. Every decision maker evaluates, whether formally or informally. That is, any time a decision must be made, questions will be formed and answers to these questions sought by utilizing some information-gathering strategy -- even if it is on a very loose and informal basis.

When an "evaluator" is called in to assist in the process, the evaluator becomes an extension of the decision maker's mental process. Specifically, the evaluator helps the decision maker by:

.Delineating: helping the decision maker determine what questions should be asked and what information is required.

.Obtaining: determining what data-gathering strategy to use and then proceeding to use it--either by collecting "new" data or compiling it from existing sources.

.Providing: making data available to the decision makers and helping them to utilize it to make the judgments necessary.

The Evaluation System in Operation

Evaluation models tend to indicate a greater degree of formality in the evaluation process than should exist in practice. In the SEA project this basic model has been utilized in a variety of ways, depending upon the unique characteristics of the evaluator(s) and decision maker(s) involved in each instance. The information which follows provides some insight into how the model has functioned in many of these instances.

Delineating. As SEA evaluation plans are developed, many individuals and groups are involved in the delineating process. Evaluators may suggest areas of concern which should be investigated, as may administrators. Input is also often received from other instructional staff members and parents.

This input into the decision making/evaluation process has been received/encouraged in many ways. For example, at the end of the first year of the project a summer parent seminar enabled parents to discuss the role they felt evaluation should play in the project and to have formal input into the development of evaluation plans. More recently, input has been received from the project parent/staff advisory council both by means

of discussions with the group and by asking members to rank general evaluation priorities and specific evaluation tasks. As a member of the Management Team, a project governing group composed of administrators, the Evaluation Manager receives much input/ideas during the course of the group's sessions. In addition, as with the parent/staff advisory council, this group has been asked at various times to rank both general evaluation priorities and specific evaluation tasks.

At the individual school level input is also received/encouraged in a variety of ways. At least once a year the Evaluation Manager and the evaluator assigned to the school have met with the principal to discuss evaluation needs for that school. Sometimes the principal has asked other staff members and/or parents to be involved in those meetings. Additionally, each school in the project has some type of parent/staff advisory group. Input from these groups may be funneled through the principal or group chairperson, or in many cases it may come as the evaluator meets with the group and/or with an evaluation subcommittee from the group (not all of the groups have such a subcommittee).

Perhaps the most important source of input with respect to efforts within individual schools is that received by "live-in" evaluators in their day-to-day contact with administrators, instructional staff and parents. This is especially important with respect to efforts to respond to individual staff members' needs for information.

Many of the evaluation ideas that evaluators receive from groups or individuals do not come from discussions of evaluation or from remarks directed specifically at evaluation. Rather, they often come as an evaluator is listening to and/or participating in discussion of a topic and that light bulb flashes in her/his mind to indicate that this is an area where the team might be able to help by gathering information. Evaluator(s) and decision maker(s) can then engage in further discussion to decide whether

that would, indeed, be a worthwhile area of pursuit. This is one of the ways in which the evaluation team organization pattern plays a major facilitating role. Without the interactions this pattern encourages, the chances for this type of input would be greatly reduced. Secondly, the intimate knowledge that evaluators have of the program(s) to which they're assigned greatly increases the probability that they will be able to recognize, during discussions, the places in which information might be collected to provide valuable input. Others less familar with the program might overlook these.

Obtaining. Many of the individuals who provide input during the delineating phase may also be involved in the obtaining step of the process. They may be involved, either individually or in groups, in helping the evaluator to decide whether to use interviews, questionnaires or observations or what type of observational approaches to use. Once the decision is made as to what type of data collection technique to use attention frequently shifts back to the delineating phase. Some of these same participants and/or others may be involved in formulating the detailed questions to be asked by questionnaire or interview, or in identifying what specific behaviors should be the focus of observations.

In addition, parent and/or student volunteers sometimes assist in the collection of data. Although such involvement occurs for all types of evaluation efforts, it is more often a factor in intra-school efforts.

Providing. In the final step of the process, providing, evaluators make the information gathered available to decision makers. This feedback is accomplished in a variety of ways, with an attempt to tailor it to the decision makers involved.

In the case of information requested by an individual staff member,

the feedback is almost always by means of an oral report to that person only. For the results of broad intra-school activities the feedback is usually in the form of a published report accompanied by oral reports/ discussions with the staff and/or the parent/staff advisory group.

Project-wide evaluation efforts, too, nearly always result in a published report. Summaries of these are often published in the SEA newsletter, which goes to all parents and staff. As a further means of reaching staff, one- or two-page summaries of the information pertinent to their school are often prepared and distributed. These summaries are somewhat longer than those which appear in the newsletter and are written specifically to communicate to the staff. The evaluator may also appear before the project parent/staff advisory group or the Management Team to discuss the results. Finally, in some instances special breakfast meetings of key decision makers have been held to enable concentrated discussion of the results from one or more published reports.

Two additional notes are in order with respect to written reports. First, an individual with training in English and/or journalism has been employed to spend some time editing reports in an effort to make them readable to the appropriate audiences. Secondly, in the Minneapolis project, evaluators consciously refrain from making judgments of "goodness" or "badness" in written reports. However, they often include conclusions or "evaluator's comments" as a part of the report. These attempt to summarize the data, with the decision as to goodness or badness left to the decision makers. Occasionally, an evaluator's comments may include judgments but most often these arise when the data suggests to the evaluator another area that should be studied. On the rare occasions when judgments about goodness or badness are included, they are clearly labeled as the evaluator's opinions and decision makers are cautioned

that they are merely to be considered as options. In this way evaluators, functioning as part of the decision making team, are able to have their input.

Maintaining Flexibility. Although commitments have been made to continue certain evaluation studies on a longitudinal basis, a new evaluation plan is developed every year. This procedure provides the flexibility necessary to assure that evaluation efforts are geared to current concerns. Simultaneously, a portion of each evaluator's time is left unallocated as the yearly plans are developed, to allow evaluators to respond to concerns which arise during the year. In some cases these concerns may be voiced by decision makers; in others, the evaluators may identify and pursue an issue before those closer to the situation are aware of its existence.

Adoption of a decision making/evaluation model similar to the one outlined can increase the probability that the questions for which evaluators seek answers are the questions which are important to decision makers. This, in turn, will greatly increase the impact of evaluation results on the decision making process.

Data Gathering Instruments and Techniques

One of the reasons many evaluation efforts fail to provide information which really addresses practitioners questions has been stated by Rosen (1973) as follows:

> Experimental research always requires valid and reliable measurement instruments. Validity and reliability are also important criteria for evaluation instruments, but as the purpose of evaluation is to improve an enterprise, the evaluator cannot limit herself to measuring only variables for which there are tested instruments and techniques (p. 4).

Furthermore, in the case of classroom observations, tested instruments and techniques rarely provide a true portrayal. For, as Goodlad, Klein &

Associates (1974) have noted:

> We soon abandoned the effort to systematize observation and data collection through a standard check list. Our observers found the list to be restrictive. They chafed over the fact that what they put on paper during and immediately following a visit reflected neither the dynamics of the classroom nor their own impressions of it (p. 28).

Certainly SEA evaluators believe that validity is important--in fact, one of the major problems in using only instruments and techniques that have been shown to be valid and reliable is that they often do not produce relevant information to answer many of the questions posed by decision makers. Available instruments or techniques frequently may provide answers to questions close to those asked and, all too often, evaluators fall into the trap of twisting the question to fit the information that will be produced. In SEA we believe that instruments or techniques must be developed or adopted to fit the specific situation at hand.

As evaluators develop or adapt instruments or techniques, they follow sound practices to maximize the validity and reliability of the resultant information. But, after all, the important point is that information that does not specifically address decision makers' questions is of little use no matter how tried and true the instrument or technique utilized to produce it.

Too, it must be remembered that as opposed to many summative evaluations, irrevocable decisions are not being made in which the life of the program is at stake. The formative information should be used to assist the decision maker in determining needed program changes. If these changes are made and do not "pan out," possibly as a result of unreliability or invalidity of information, continual formative monitoring will allow corrective action to be taken quickly.

Importance of Process

Another reason many evaluation efforts have not provided effective formative information is that evaluators have frequently concentrated on product or outcomes data and have overlooked the importance of gathering process information. While most of us in SEA believe that the political realities of most evaluation situations make it advisable to devote some attention to student outcome data, we agree basically with Charters & Jones (1973) when they state:

> ...we are inclined to the view that the school's responsibility for a child's education ends...at the point where the student is found to be engaging in, and engaged by, sequences of instructional events which, according to the best contemporary knowledge of pedagogy available to the school, have a reasonably high probability of producing the desired learning outcomes. To hold a school system accountable for the measured outcomes, themselves seems to be an unwarranted shift to one institution of the responsibility that more properly rests in the pedagogical sciences...(p. 7).

We have emphasized collection of information of a process or environmental nature. Instead of simply telling the decision maker what the end result is, it tells the her/him a myriad of things about what is actually happening in the program. Such things as what kinds of materials are being provided to kids, how much time they have to work on various tasks, whether there are places for kids to go when they want to work quietly by themselves, what teachers, etc., are doing and how kids are reacting. Only when supplied with this kind of information can decision makers make informed changes in program question. We have also collected much survey information which is useful in providing a picture of how participants view the project, where they think it should go in the future and so on.

Once these kinds of information are provided to decision makers, it

is up to them to decide whether what is taking place is consistent with the philosophy of their program and, if not, what changes the data indicates should be made to correct the inconsistency.

The discussion of the model has indicated how decision makers are involved at each step of the process. Further insight into the evaluation of innovative programs can be gained by considering the kinds of evaluation studies carried out in the Southeast Alternatives Project and the methods which are used to gather the necessary information.

Some Examples of Formative Evaluation in Action

Project-Wide

Over the years, two major classes of evaluation service have pervaded the project-wide efforts. One of these has attempted to determine the characteristics of students who attend various alternatives, where they come from and why they chose the program they are in. The prime source of information for such studies have been student cumulative record cards and official enrollment lists. From these sources evaluators have been able to record students' age, sex, days absent, number of parents in the home, parents' residence area and occupation.

Utilizing this data, it has been possible to determine whether or not the choice process has produced programs which are homogeneous with respect to any of the characteristics. Of especial interest is whether or not parents and students are really availing themselves of the opportunity to choose a non-neighborhood program.

Additional information about the choice process has been obtained through the use of surveys to gather information about who made the choice of schools and what major factors influenced this decision.

A second major class of project-wide evaluation efforts has been directed at helping decision makers know how various groups feel about many aspects of the project. In these efforts, information has been gathered

from each of the three major groups important to the project -- students, parents and staff. Written surveys have been utilized to solicit parent and staff opinions (with return rates of approximately 60% and 85% respectively), and student opinions have been obtained by interview or questionnaire, depending upon the age group involved.

The parent and staff surveys have concentrated mainly on asking people how satisfied they are with various aspects of the project, how they feel about educational philosophy and/or organization related issues and how they feel about issues upon which it is believed decisions will have to be made in the future. In the case of students the primary emphasis has been on satisfaction with program and how and why the choice of schools was made.

Student surveys -- written or interview -- have only involved samples of the student population. In the case of staff surveys, the small size of the SEA staff coupled with the ease of written surveying has made it possible to survey all staff members. In fact, the small size has almost necessitated that information be solicited from all staff in order to assure adequate n's for any analyses involving crossing of independent variables. Even though the size of the parent population is such that sampling would provide adequate n's for any desired analyses and would also diminish the size of the task, each family has received questionnaire. The reasoning behind this has been that these are their schools and that project decision makers care what every family thinks about their schools. Thus, while sampling would provide equally valid results, psychologically it is important to allow each family an opportunity for involvement

Other project-wide efforts have primarily been evaluations of specific programs and normally have not been conducted periodically. These have included evaluations of the SEA Director, the Teacher Center, the volunteer programs, social work services, the Tuesday Released Time and

Human Relations programs and a study of how parent/staff groups have participated in project governance. All in all, some 36 published reports of project-wide evaluation efforts were produced during the first four years of the project, with a few others reported only orally or in memorandum form.

Intra-School

While some evaluation service has been provided to each of the alternative programs in SEA, the greatest commitments of evaluation personnel were to those programs which were deemed to be undergoing the greatest degree of change. These schools were those where the educational philosophy being adopted required major changes in the total school environment.

Major environmental changes meant that adults and children were interacting in new ways, that new arrangements of time and space were being adopted and new materials and activities were being made available to children. Evaluators have been able to provide decision makers in these programs with information to help them assess how the environment relates to the program goals and how children are responding to this environment. Through observation and teacher interviews they have been able to provide information to such environmental questions as:

- How much space is available for use in a particular activity? Is the space relatively free from distractions?
- How much time is given to formal instruction in an activity? How much free time for children to participate in the activity of their choosing?
- What kinds of materials are available to children? What range of ability/age are they suitable for?
- What kinds of interactions take place between adults and children and children and children?
- How much staff time is required to work with students with special needs?

In addition to information about the environment the school provides, it is also important to assess how children react to this environment. Through observations and interviews with children as well as by examination of children's work and records, evaluators are able to provide information about these responses. For more detailed accountings of the process of intra-school evaluation as it relates to environment, the reader is referred to either one of two articles by my colleague Ruth Anne (Aldrich) Olson (1974; 1975).

Other intra-school evaluation efforts undertaken by members of the evaluation team have covered a variety of tasks. In several schools, evaluators have developed and administered instruments designed to assess how children feel about school, teachers, self, peers, etc. Evaluators have also developed and administered survey instruments to evaluate administrators. They have conducted studies to find out why students/parents choose a particular program, who made the choice and how satisfied they are with the program. They have gathered information about how students use resources outside the school (e.g., classes at another school or university). They have provided evaluation information about a specific program at a specific school (e.g., math, reading, early graduation, community day). This list reveals only some examples of the kinds of tasks that have been performed by evaluators assigned to the schools.

The SEA evaluation staff has also provided personnel support and/or financial assistance to many SEA schools as they developed objectives-based tests and/or skills recording charts. While summarization of data from these has, in some instances, been used as part of program evaluation efforts, their main purpose has been to assist school personnel as they work with individual students and as an aid in reporting to parents.

Perhaps the most exciting aspect of the intra-school evaluation efforts

and the one which may have been most prominent in developing the credibility noted earlier in the paper has been the ability of evaluators to respond to needs that arise during the year, particularly those of individual teachers. Each year as the evaluation plans are designed, evaluators have some time allocated specifically to respond to evaluation requests that may arise during the year. These requests may come from advisory groups, individual teachers, administrators or parents and students. In this way evaluators are often able to provide quick feedback on a matter of concern. Frequently the problems raised and the information gathered may seem simple, but the multitudinous demands on the time and attention of others in the building prevent them from gathering the information themselves. Many times, too, the participants are too close to the problem and the evaluator is able to take a fresh objective look at the situation. The ability and willingness of evaluators to respond to matters of immediate concern, whether posed by the administrator or least senior staff member, certainly enhances feelings among participants that the evaluator is indeed there to serve them.

Problems

As has been indicated earlier, the SEA internal evaluation effort does appear to have been quite successful. But that does not mean that it has been completely trouble-free. The purpose of the present section is to discuss some of the problems which have arisen. Some have been simply minor nuisances while others have been more perplexing: no attempt will be made here to make a distinction. In another setting what was a mountain for SEA evaluators might simply be a molehill and vice-versa. Also, no attempt is made to discuss problems which arose with a particular study, for these are often idiosyncratic to a particular set of local circumstances.

One problem that has had to be overcome in many instances has been that of getting audiences to accept formative reports in the spirit in which they're intended. Because of past views of evaluation, many people have come to view any weaknesses indicated by evaluation information as a negative reflection on the program. They forget that very few new programs develop without problems along the way. The whole purpose of formative evaluation information is to help spot these weaknesses so that corrective action may be taken. Part of the role that evaluators must play in developing credibility for their efforts is to help decision makers to become aware of the role of formative information, this information, properly used, can help them develop stronger programs.

In the beginning a conscious decision was made -- not without some pressure to do otherwise -- to create the SEA Internal Evaluation Team as a group entirely outside the control of the Minneapolis Public Schools' Research and Evaluation Department. During the history of the project relations between the two groups have not been extremely cordial - in fact, they might best be said to have existed in a state of détente. I believe that if the two groups had been able to interact more closely, each could have gained from the other. Whether this would have meant the SEA group would have had to have been a division within the MPS R & E Department is not clear. And, if this had been necessary, it is not clear whether the advantages would have outweighed the disadvantages.

As the purpose of the Experimental Schools Project was to research innovative approaches to education, so was it to research new approaches to evaluation. To accomplish this the SEA team needed freedom to break out of the old evaluation mold and to try new things. Who can say whether this would have been possible if the SEA group had been a part of

the already established MPS R & E Department. One thing is clear to me that each group could have benefited from more open-minded interactions with the other.

When evaluators have been split between two programs problems have sometimes arisen. It has sometimes been hard for them to keep the unique personalities and needs of both programs thoroughly in mind. Also, if major problems arise in both programs at once, the evaluator cannot always devote greater efforts to one while the "crisis" is averted. Of course, the logistical problems -- having materials at two locations, etc. -- also make it more difficult to serve two programs simultaneously.

Also, when the split assignment is between a school and project-wide efforts, the evaluator's ability to achieve the credibility necessary for effective intra-school functioning is sometimes hampered. One of the factors that would seem to lead to this is that project-wide evaluators are generally viewed as somewhat more external to programs. A second factor occurs when some of the project-wide efforts assigned to that evaluator are controversial, in the sense of not being generally supported by all decision makers. The problem of split assignments affecting credibility can be minimized by having the evaluator spend as much time as possible in the building to which he/she is assigned even if she/he is working on the project-wide task. Secondly, assign that evaluator to noncontroversial project-wide efforts, especially to those that are most closely related to intra-school efforts.

One possible solution to this dilemma of split assignments is to employ part-time personnel. In this way an evaluator will have to cover only a single program and yet the number of full-time equivalent evaluators employed can be kept at the desired level. Of course, many of the problems of split assignments will not be alleviated if the evaluator is

employed elsewhere too. In settings such as SEA, where community members have been utilized to fill many roles, including that of evaluator, such arrangements are often possible. Of course, the management time required when two persons are employed half-time is greater than that required when one person is employed full-time, and appropriate adjustments must be made in that regard if any sizable number of part-time employees are to be utilized.

Conclusion

In the Southeast Alternatives project we -- evaluators and decision makers, together -- have developed an eclectic evaluation model which I believe provides useful formative information for decision makers. In this paper I have discussed what I believe to be the most salient features of this model and have attempted to give a picture of the actual functioning of the model. I believe that many of the SEA approaches to evaluation can facilitate the chances of providing useful evaluation services in other situations. However, I think it would be erroneous to assume that adoption of this model--or any other--will automatically assure a successful evaluation effort. There are no magic models or pat answers in evaluation. Evaluation efforts must be tailored to the needs of the unique program in question. As we in SEA have developed an evaluation effort suited to the needs of the SEA project, so must others pick and choose from available models and techniques and develop new models and techniques to fit the needs of the program to be evaluated.

Finally, perhaps it sounds cliche-ish, but, it is people that make the difference. No model or technique can assure success unless the evaluators involved have the skills required to make it go. And, at the top of that list of skills must come the interpersonal skills to work with the pro-

ject decision makers -- to develop a sense of rapport and credibility with them. Then, after than, they must have the technical skills -- or access to them -- to collect, analyze and report the necessary information.

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